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Should Cousins Marry?

By Dr. Andrew Wilson. See page 130.

HEALTH

A WEEKLY JOURNAL OF

DOMESTIC AND SANITARY SCIENCE.

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &c.

Vol. XII.—No. 295. FRIDAY, NOVEMBER 30, 1888. [Price Twopence.

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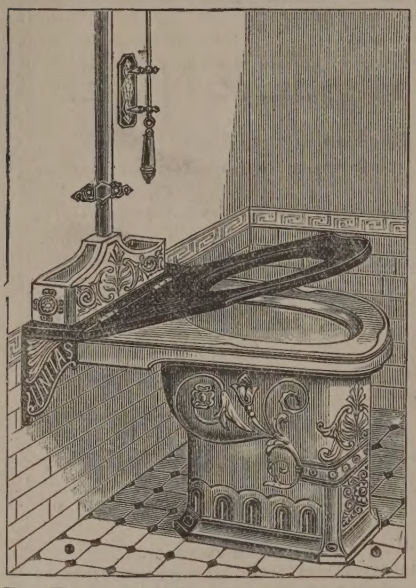

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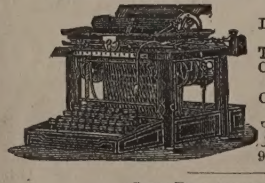

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◆ HEALTH ◆

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

I BEG to remind my readers that the CHRISTMAS NUMBER OF HEALTH will be issued as the usual weekly number for FRIDAY, DECEMBER 14TH. This number will be much enlarged, and, as previously announced, will contain a full budget of stories, as well as other matter of seasonable and interesting character. I beg the kindly recommendation by my readers to their friends of HEALTH "ANNUAL" in the shape of the Christmas number, which has hitherto taken a prominent place among the Yule-tide magazines. The price of the CHRISTMAS NUMBER, despite its enlarged size, will not be increased over that of the ordinary number of HEALTH.

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CORRESPONDENTS frequently inquire in the pages of HEALTH for information regarding the treatment of corpulency. I may point out to those who are interested in this subject that an article by me on "Fat and Fat Cures" appears in *Longman's Magazine* for December, and may afford a readily appreciable idea of the sources of fat-formation, and also of the principles of the diet-cure for obesity.

FIRE-BRIGADES for ladies, it is reported, have been formed at Girton and Newnham Colleges, and more recently at the Royal Holloway College. Mr. Merryweather, the authority on fires and fire-engines, at the request of the principal of the latter college, has organized the lady-students into a brigade, and reports that in a preliminary drill they showed much alacrity in the performance of their duties, the majority being very quick and agile in making the connections with the hydrants, running out the hoses, working the fire-pumps and corridor engines, and various other manœuvres. The students drill in sections, the respective floors being allotted to different detachments in order to secure their familiarity with the requirements of each part of the building. Such brigades are useful. They diminish the probability of disorder and panic in case of fire. The drill is a healthful exercise, and adds to the general *esprit de corps* which should prevail in an educational establishment.

✣ ✣ ✣

DR. B. F. DAVENPORT, chemist to the State Board of Health of Massachusetts, has been analyzing the tonics and bitters with which the American market is flooded. The number of these which have been examined by him is forty-seven. Of this number, forty-six contain alcohol, in quantity varying from 6 to 47·5 per cent., 21·5 per cent. being the average. One of the tonics, advertised as "not a rum drink," contains 13·2 per cent. of alcohol. Another, admitted to contain Marsala wine, contains as much alcohol as that wine. A coca beef tonic, advertised as made "with sherry," contains 23·2 per cent. of alcohol, while sherry contains but 18 or 20 per cent.

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PARKER'S tonic, claimed to be a purely vegetable extract, "stimulus to the body without intoxicating," contains 41·6 per cent of alcohol. Whisky and brandy contain but 50 per cent. of alcohol. The advertisement of this tonic says, "Inebriates struggling to reform will find its tonic and sustaining influence on the nervous system a great help to their efforts." Schenck's seaweed tonic, said to be distilled from seaweed, and to be perfectly harmless, contains 19·5 per cent. of alcohol; Baker's stomach bitters, 42·6 per cent.; Hoofland's German bitters, advertised to be purely vegetable, and free from alcoholic stimulant, 26·5 per cent.; and Hostetter's stomach bitters, 44·3 per cent. Kaufmann's sulphur bitters contain no sulphur, and is advertised to contain no alcohol, but was found by Dr. Davenport to contain 20·5 per cent. Richardson's concentrated sherry-wine bitters contain 47·5 per cent., 2·5 less than whisky and

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brandy. Walker's vinegar bitters contain 6·1 per cent.; and Copp's White Mountain bitters about the same quantity. Evidently American "tonics" are fluids of somewhat lively composition. The effects of using such "tonics" regularly appears to me to be tantamount to inducing a state of chronic alcoholism.

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As a public speaker, I have often had to undergo the painful and annoying fire of often needless coughing which seems to affect certain members of every audience. The *Lancet*, in speaking on this topic, says that "Whoever has attended a place of worship must have noticed that the storm of coughing which prevails therein, and the throat clearing, which moves like a rabble of wrong notes before the church music, are not wholly natural phenomena. They are, to a large extent, avoidable evils bred of habit and thoughtless imitation, and their very desirable reduction is therefore by no means hopeless. Even where a basis of disease underlies the explosion, a little self-control could usually do something to lessen its force or its frequency. The same is of course doubly true in the case of the merely habitual cougher. A variety of medicinal aids might, moreover, be used in support of such voluntary efforts. There is, lastly, the option of refraining from the use of the voice in worship should every other means fail to assure that reasonable degree of quiet which is natural and decent in public worship.

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"REMONSTRANCE on the part of the officiating clergyman affords another possible remedy, and a preacher must indeed be often tempted to reprove this form of disturbance as much in the interest of his hearers as himself. Occasionally his judicious interference might be useful. We cannot doubt that it has from time to time been resorted to. It must be remembered, however, that nowhere are tact and temper so needful as in the pulpit, and that, however easy of use this corrective may appear, it would be unwise to establish any set method of restraint in a case where so much depends on personal discretion. A notice affixed at each entrance door would probably better answer the same purpose. In one respect, indeed, both clergymen and their lay assessors are open to some degree of blame in the matter. The arrangements for heating and ventilation are defective in almost every church. By seeking out and amending any evident errors in these respects the official members of a congregation would at least be doing what they could to abate the coughing nuisance."

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I HAVE not hesitated personally to protest, in a good-natured way, against this *bête noir* of public speakers, and my remonstrances have been attended with good effect. Nothing is so likely to disturb a nervous speaker as a rolling battery of coughs, and I have repeatedly noticed that many of the "operators" are persons in whom coughing has become more a habit than anything else. I sympathize with the American clergyman who announced, in the midst of a battery of this kind, that in future he would allow "an interval for coughing every fifteen minutes." People are not aware, as a rule, of the excessive annoyance they give to their neighbours, as well as to the speaker, by their coughing, and many persons take not the slightest trouble to smother the sound of their coughs. Surely there are such things as glycerine lozenges and other demulcents in the world; and I might add that if a cough is really severe, and indicative of chest-cold, the subject has no right, as a matter of personal safety, to risk the heat and chill of a church or lecture-hall.

Original Essays

"Life is not to live, but to be well."—*Martial.*

SHOULD COUSINS MARRY?

BY DR. ANDREW WILSON.

(Concluded.)

ALTHOUGH, as we noted in last week's HEALTH, the marriage of those near of kin was prohibited by Church laws—ranging from those of Aaron and Moses to those of Rome and the Koran—it is not difficult to find examples of communities in which consanguineous unions have been both permitted and encouraged. Among certain savage races such marriages appear to be common enough, although they may not represent the universal custom of the tribe. The Tartars, Caribs, Samoiedes, and North American Indians illustrate cases of this kind. The ancient Persians and Egyptians also encouraged, or at least made perfectly legal, the union of even the nearest of kin. Ribot remarks that in Syria such unions were common, "at least, in the reigning families, from the earliest times down to the end of the Seleucidæ."

The late Dr. John Davy, many years ago, placed on record (he is quoted by Child) his observations on a secluded Scottish dale—that of Glenfinlas, in Perthshire—among the inhabitants of which the marriage of near of kin were common. Davy remarks that "there are some facts which lead me to think that if animals coming together to breed are quite healthy, and free from any taint of disease, their offspring will be healthy. In small isolated societies there must be such breeding in and in, unless special precautions be taken to prevent it. I shall mention a few instances in which I believe no precautions of this kind have been attended to.

"Some forty years ago I visited the secluded little dale, Glenfinlas, in the highlands of Perthshire, and I there learnt that, with one exception, there was no instance in the memory of man of a Stuart marrying out of the glen. The few families, I believe, were healthy: at the house where we were entertained our hostess was remarkable for beauty, and was above the average size of women. They lead a pastoral life, milk forming a good part of their diet.

"In the Scottish islands and islets, in many of which the inhabitants are few in number, and have little intercourse with the mainland, the same kind of marriages must often occur; yet the people are supposed to be, and, I believe, are, nowise degenerate. We are told on good authority that pulmonary consumption is comparatively rare amongst them. In Cornwall there are small fishing villages so situated, in a manner, so isolated, that marrying of blood-relations must be common—such villages as Mousehole and Newlyn, in the Mount's Bay; yet these people bear no marks of degeneracy, but the contrary; they are remarkable for their good looks, and, I believe, good health, to which the active habits of both sexes, and their fish diet, may greatly conduce—and their living so much in the open air."

Dr. Davy goes on to quote examples of the same conditions as regards marriage in the Mediterranean islands, wherein good health and freedom from disease are found. In the Lipari islands, the Ionian islands—*e.g.*, Fanno, Maganisi, Vido, and Cerigo—which he visited, he saw no signs of disease among an "in-bred" population. "In the island of Fanno," he adds, "towards the entrance of the Adriatic, the inhabitants lead much the same kind of (pastoral) life, and are, I believe, equally

healthy and as personable in their appearance. As to size, they are not less than the average; they are singularly contrasted with their cattle—a small breed, smaller by far than that of the neighbouring Corfu, or of Italy on the Calabrian coast, yet of delicate make, and very active. Their peculiarity as to size may be owing—such was my conjecture on the spot—to a scanty pasturage and purity of blood, and in relation to health and form, goodness of climate and wholesomeness of food, though scanty."

Naturally, one turns to the works of Mr. Darwin for facts and views bearing on the results of consanguineous unions at large in the animal world. The general view that "breeding-in" results in deterioration of stock is admitted by Darwin, and the opinions of breeders is quoted in support of this doctrine. Yet Darwin adds, with that impartiality which distinguishes all the writings of this great seeker after truth, that "with cattle there can be no doubt that close interbreeding may be long carried on advantageously with respect to external characters, and with no manifest apparent evil as far as constitution is concerned." Bates, a famous breeder, remarked that "interbreeding with bad stock is ruinous and disastrous, but with first-class cattle it may be practised safely within certain limits."

In France a flock of sheep was successfully kept up for sixty years without the introduction of any fresh blood at all. In the case of pigs, curiously enough, "in-breeding" seems to produce evil results. With regard to birds,, the evidence appears to declare that "in-breeding" is attended by weakening effects. M. Beaudouin tells us that a flock of Merinos which were bred in and in for twenty-two years not only showed no signs of degeneracy, but had actually improved in some respects, while the fertility of the intermated sheep was not impaired. Again, the case of the celebrated bull "Comet," as well as those of several notable race-horse sires, would appear to show that in these animals consanguineous unions are not injurious. In one case of the "Comet" tribe, the same animal was the sire in four successive generations—these unions being infinitely closer than any consanguineous matings possible to man—yet the stock remained perfect and highly prized for its physical qualities.

So far, the evidence would seem to point, amongst other conclusions, to the fact that "in-breeding" affects different animals in very varied fashion, and it is, perhaps, impossible to discern the conditions which give to one race a superiority over another in this respect. In the case of man, the problems are naturally still more complex, and we are left to face the two opposing ideas which declare consanguineous marriages to be hurtful, directly or indirectly, on the one hand, and not necessarily injurious on the other. So far as I can discover, no authority has actually advocated the marriage of those near of kin in *preference* to the union of those not related. I apprehend it is not denied that "fresh blood," to use the familiar expression, if it is that of healthy and robust stock, secures, without doubt, an increase of physical strength in the human beings who issue from such a union. It is, of course, equally true, that "fresh blood," in itself, may be of poor and unhealthy character, and that the consequences of marriage with a weak or diseased strain of foreign blood, may result in the production of offspring as weakly and as feeble as ever were found to appear in cases where cousins were the parents. We shall discern, in fact, that here, as elsewhere, it is the primary condition and original state of the parent stock, as regards health, which really determines the health of the progeny. All other conditions are of secondary moment in view of the phase just mentioned.

On the side of the objectors to cousin-marriage in any degree, we find quoted the opinions and statistics of those who allege nervous diseases, and other defects of body, to follow consanguineous unions.

Dr. Boudin, who is always quoted by writers on this topic, declares that in Berlin he found in 10,000 Catholics three deaf-mutes; in 10,000 Protestants, six; and in 10,000 Jews, twenty-seven: the inference being that with closer "in-breeding" in the Jews there was a vast increase in the proportion of deaf-mutes born. In America, in 1840, the negroes of the United States showed, in Iowa, ninety-one times as many deaf-mutes as did the whites; and the black population was, and is still, much given to consanguineous marriages. These figures have, of course, been closely criticized, and have by no means been accepted as expressive of the truth about deaf-mutism as related to "in-breeding" in man. The original physique and family history of the parents of deaf-mutes, for instance, would require to be closely scrutinized before such bare statistics could be confirmed. Indeed, Dr. Boudin's views might be found simply to add additional weight to the opinion that it is the parental health which in one kind of marriage or another materially influences the progeny, apart from consanguinity itself.

M. de Quatrefages, a distinguished biologist, expressed the opinion that the child is only a resultant or compromise between the tendencies of both the parents; he might have added that parental tendencies themselves are liable, in turn, to be influenced directly or indirectly by the preceding generations. If the parents are healthy, says Quatrefages, the marriage of near-of-kin in that case will tend to preserve this healthy state in their descendants. Given original health, in other words, in the parents, and their nearness of kin will be followed by a repetition of that healthy state in their children. But, contrariwise—and herein lies the practical outcome of the whole question of the marriage of cousins—if the health of nearly-related parents be disturbed or originally unhealthy, *it follows that such health-derangement will probably be of like nature, and therefore of intensified kind, in both parents*. Hence, "such unions will be injurious, and all the more dangerous in proportion as the morbid predispositions common to both parents are more marked."

The summing up of the question, then, "Should Cousins Marry?" may be attempted on the lines just indicated. Says Quatrefages, "The consequence we are to draw from all these facts would appear to be that near relationship between father and mother is not in itself hurtful, but that, in virtue of the laws governing heredity, it often becomes so; and hence, in view of the eventualities to which consanguinity leads, it is, at least, prudent to avoid consanguineous marriage."

This opinion, it must be said, is a sound one. Even in view of the facts already quoted regarding the freedom from disease of the offspring of consanguineous unions where the parents are healthy, we must think of the many causes, often hidden and unsuspected, which arise to disturb health. It is not much to the point to speak of the continued health of the in-bred population of Glenfinlas or Fanno. There we have no admixture of new blood, but we have also none of the many conditions of health-disturbance which affect the dwellers in great cities. We cannot argue about a few islanders far removed from the risks and deteriorations of human life as we may argue regarding the units who comprise the population of our crowded towns. The two states or phases of life are in no sense parallel.

Cousins, then, may marry, if they are so disposed, on the physiological assumption that they are strictly healthy. But if any disease taint is present on either side, the probabilities are that this taint will develop in increased force in their offspring. I would add that this remark applies with increased force to diseases of nervous type. When so much has been said, science has practically come to the end of her tether regarding consanguineous marriages, in so far as the evidence presently at her command is concerned.

THE CHEMISTRY OF THE HOUSE.

By Dr. Drinkwater, F.C.S., &c.
Lecturer on Chemistry in the Edinburgh Medical School, &c.

NINTH PAPER.

GAS.

Our last article treated, in the main, of the chemistry of combustion, and the present one must treat of the same phenomenon to a greater extent.

Gas is simply the volatile inflammable portion of the coal separated and collected from the fixed carbon. A very old but simple and instructive experiment will give us some insight into the nature of gas-making. Fill the bowl of a common clay tobacco-pipe with coal in small pieces, close the open bowl with clay, and insert it in the fire. In a short time a smoky gas issues from the stem; this is impure gas, and may be lighted like an ordinary jet.

The invention of gas is now more than a hundred years old, and is ascribed to a William Murdoch—a Scotchman who was acting as manager to a mine at Redruth, in Cornwall, at the time of this discovery. He made gas in a similar manner to that used in the present day, and conveyed it in pipes to the offices connected with the mine.

Murdoch was afterwards employed in Watts' engineering works in Birmingham, and he lighted the factory with gas. Like all new inventions, however, it met with an enormous amount of opposition, and the proposal to light the streets with gas was scouted as being both dangerous and impracticable. Science, however, conquered, and now there is hardly a village of any size in the United Kingdom which does not possess a gas-works. In the large towns, it is threatened with extinction by its powerful rival, electricity; but still gas has certain advantages and properties which will enable it to maintain its footing as one of our industries, even if we discontinue its use as a lighting agent. As evidence of the magnitude of the industry, the last Parlimentary report on the subject informs us that over seven million tons of coal are annually distilled in the gas-works of the United Kingdom.

Having glanced thus briefly at the history of the invention, let us now describe its manufacture. The first place we examine on entering a gas-work is the retort-house, where the coal is heated in closed cylindrical vessels, made either of iron or fire-clay. The coal is placed in the retorts, as they are called, and heated to a bright red heat. As no air can get into the retorts, the coal does not burn, but only parts with its volatile constituents—which consist of various inflammable gases, ammonia, sulphur compounds, carbonic acid gas, and tarry matters. The inflammable gas consists of a mixture of hydrogen and bodies termed by the chemist hydrocarbons, these latter being composed of hydrogen and carbon chemically united. It is to the presence of hydrocarbons that coal-gas owes its illuminating power. The gas, after leaving the retorts, passes through a large pipe half-filled with water, called the hydraulic main. This main serves two purposes—it prevents gas passing back from the gas holders to the retort, and it assists in the purification of the gas by arresting, to a certain extent, its tar and ammonia compounds. If we now follow the gas out of the retort-house, we find it enters a series of pipes built close together, and exposing a large surface to the cooling influence of the air, termed condensers. By traversing these pipes, the gas is cooled, and deposits the remainder of the tar. It is next allowed to ascend a tower, called a "scrubber," filled with coke, meeting in its ascent a descending stream of water, which washes out the ammonia.

We have now removed from the gas the tar and ammonia, both very valuable products in their way, and substances from which a considerable profit is made. But there yet remain other impurities which must be removed before the gas is fit for use, and which, unfortunately, up to the present, yield no profit to the gas companies. They are sulphur compounds and carbonic acid gas. The first-named tarnishes our silver, spoils our pictures, and destroys our books—in fact, plays general havoc when burned in rooms. The second lowers the illuminating power of the gas. They are both removed by passing the impure gas over lime—the resulting "spent-lime," as it is termed, being of no value whatever; in fact, the gas companies are only too glad to get any one to remove the noisome compound which, I may add, rejoices in the name of "Blue Billy." After purification, the gas is measured in a meter of Brobdingnagian proportions, and then passed into those huge iron structures improperly termed gasometers, which we are accustomed to see in the neighbourhood of gas-works, from which it is distributed for consumption.

Let us now inquire what becomes of the impurities which we have removed from our crude gas.

And, in the first place, let us follow the various transformations of the foul-smelling liquid known as *gas liquor*. This consists of the watery liquid from the hydraulic main and scrubbers, and owes its value to the ammonia which it contains, which is extracted and used as one of the most valuable manures known to the farmer.

The tar is distilled, and from it we get a substance familiar to most of us on account of its cleansing properties as benzene; from which, in turn, is produced those beautiful colouring matters known as aniline dyes. By a further distillation of the tar, a valuable disinfecting agent, carbolic acid, is obtained; and the residue, from which all volatile matter has been driven off, is used as asphalte for making roads and pavements. In the list of the useful products of gas-making, we must not forget the coke, which is the solid non-volatile residue of the coal left in the retort, the appearances and use of which are too well known to need more than a casual reference.

It requires no very great power of observation to note the difference in quality between the gas manufactured in various localities. In many instances the bad quality of a gas may be due to insufficient care in the purifying process; but in large towns possessing well-managed works the differences can hardly be explained in this way. It is more likely due to differences in the quality of the coal employed. In some districts, there exists beds of a peculiar kind of coal, termed *cannel*, which is richer than ordinary coal in volatile constituents, and, therefore, is more valuable to the gas manufacturer. It is a hard coal, which does not soil the fingers, in fact, it

may be cut and polished for ornamental purposes. Its name is derived from a north-country corruption of the word candle; for so rich is it in volatile, inflammable materials, that it may be lighted, and will burn, like an ordinary candle, and in many parts of Lanarkshire it is still so used. This cannel coal is, then, the best variety for gas-making; but it is a costly material even in the immediate district where it is found, and carriage, of course, considerably increases this cost; the result is that only certain towns can afford its use.

An Ambulance Handbook.—A Third Edition of the eminently practical and useful book, entitled *Illustrated Lectures on Ambulance Work*, by Dr. R. Lawton Roberts, M.D., has just been issued by Mr. H. K. Lewis, 136, Gower-street, London, W.C. The present edition has been enlarged and extended. In its scope and treatment Dr. Roberts' volume is all that can be desired as a guide to the principles and practice of first aid.

Hard and Soft Water.—All cooks do not understand the different effects produced by hard and soft water in cooking meat and vegetables. Peas and beans cooked in hard water, containing lime or gypsum, will not boil tender, because these substances harden vegetable cascine. Many vegetables, as onions, boil nearly tasteless in soft water, because all the flavour is boiled out. The addition of salt often checks this, as in the case of onions, causing the vegetables to retain the peculiar flavouring principles, besides such nutritious matter as might be lost in soft water. For extracting the juice of meat to make a broth or soup, soft water, unsalted and cold at first, is the best, for it much more readily penetrates the tissue; but for boiling where the juices should be retained, hard water, or soft water salted, is preferable; the meat should be put in while the water is boiling, so as to seal up the pores at once.

Fat Emulsions.—The high value of cod liver oil in the treatment of phthisis is a widely recognized fact. If the wasting consumptive can be enabled to assimilate fat the progress of the disease can usually be stayed. Fat emulsions are made artifically, but they do not keep well; and in time separate. Cream cannot always be had, and preserved cream has not hitherto been made a marketable article. Milk is apt to turn sour; to say nothing of many persons disliking it. It is rather a dilute form of fat, and therefore not suited to some cases. It is, too, a ready vehicle for zymotic disease, and therefore it is not safe to drink it promiscuously. A fat emulsion which will keep, which is readily digestible, and which can be procured in any quantity, has long been a desideratum with the growing class of persons whose fat-digestion is imperfect. Mr. Edward Loeflund has met the difficulty in the following manner: The cream is taken from the best milk of the slopes of the Bavarian Alps, renowned for their herds. The cream is concentrated in vacuo, and preserved by the addition of a certain proportion of maltose. The compound is rich in fat; is acceptable to the most fastidious palate, being really, in taste, a confection, while the emulsion form of fat is not destroyed by the evaporation process. For those who cannot take cod liver oil this preparation is of priceless value. Unfortunately it cannot be produced cheaply. It is put up in small tins, sufficient for three or four days, and will keep for a week without change after the tin has been opened. By lying in a stock of tins the imperfect assimilator of fat can travel anywhere, or go to sea, without being deprived of the necessary fatty food.—*Dr. Fothergill.*

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

CONSTIPATION.

Among nearly all classes of people, especially among women, this is an ever-present evil, and one of the most troublesome to cure. Laxatives are given, but after a time lose their effect; recourse is then had to strong cathartics. The effect is to weaken the alimentary canal, and so matters go from bad to worse. To successfully treat constipation the causes of it must be carefully ascertained. The great difficulty is that the causes are so manifold.

Long continuance in one position tends to induce the trouble. It is, therefore, common to needle-women and to sewers at machines. Those leading sedentary lives are predisposed to it; as also are poor people and women living largely upon bread and tea, and those suffering from an exhausting drain upon the system. Regarding the complaint itself, there are generally two things at fault. Either the muscular wall of the intestine is deficient in tone, or else there is a deficiency of secretion, or both causes may be present.

Medicines which increase the secretion without improving the muscular or rhythmical action of the intestine, are worse than useless, and highly injurious. Many cases of constipation are due to a disordered liver, and if the remedies do not include an hepatic stimulant or corrective they will be of little worth. Many a case of constipation is due to poor blood. Poor blood tends to aggravate constipation, and the constipation to further deteriorate the blood, and so on.

There is one drug which acts on the muscular wall of the canal, and that is Nux Vomica. It increases muscular action and restores the tone. It does not materially increase the secretion; and, therefore, it should be combined with some drug which does, such as Cascara Sagrada. Cascara Sagrada acts after the manner of Rhubarb, but more naturally, and without causing subsequent constipation. In the form of Tabloids it does not gripe, and exerts a gentle action on the liver. This is the form in which Cascara should be used by healthy, strong people. Where, however, the muscles seem flabby, and there is mental depression, and indications of liver trouble, the "Cascara, Euonymin, and Nux Tabloids" answer best.

One well-known physician gave Cascara in fifty cases of constipation, with curative results in forty-three, relief being obtained in the other seven. For an occasional aperient where Mercury appears undesirable, the Laxative Tabloids should be used. They are mild and efficient, and contain Colocynth, Jalap, Hyoscyamin, Podophyllin, Leptandrin, and Peppermint. They are excellent for the liver.

In stomachic troubles with deficient biliary and intestinal secretion, and in catarrh of the biliary ducts with jaundice, with alternating diarrhœa and constipation, "Rhubarb and Soda Tabloids" are indicated. They contain five grains each, the dose being one or more. For constipation accompanied with piles, the Compound Rhubarb Tabloids—containing Rhubarb, Aloes, Myrrh, and Soap—will fulfil the requirements well.

These Tabloids contain three grains, the dose being one as required.

Rhubarb and Magnesia is an old and favourite combination also supplied in five-grain Tabloids. In the constipation of women, Aloin Tabloids, one nightly,

will prove corrective; and in this connection we should refer to what are known as Anti-constipation Tabloid Triturates. They contain Aloin, Belladonna, Strychnine, and Ipecac. One or two may be taken three times a day. Their action is perfect. They do not gripe, restore the tone of the intestinal wall, and are curative. An adjunct to other treatment where the intestinal secretions are deficient is plenty of oil.

An old and very good plan was to take as much olive oil as one could tolerate with the evening meal. It is needless to add that in the constipation of children a little cod liver oil, thrice daily, supplies that which nature wants. It should be taken as the Kepler Solution. Pale-faced children should also have "Beef and Iron Wine Elixoid."

COFFEE-DRINKING AND BLINDNESS.

DR. HAYES C. FRENCH writes as follows regarding Mr. Holaday's article in the *North American Review* recently criticized by "M.D." in our pages (see HEALTH, Nos. 291 and 292):—

Having for the past fifteen years made a special and continuous study of diseases of the eye, and the morbific agencies affecting that organ, I must confess surprise at the novel and startling claims of Mr. J. M. Holaday in his article upon "Coffee-Drinking and Blindness," in the September number of the *North American Review*. The statements of the writer in relation to the effects of coffee-drinking upon the eye find little or no support in the testimony of the great body of learned oculists whose evidence upon the subject of ophthalmology certainly deserves some consideration. There is a positivism, and almost dogmatism, in the writer's assertions that would seem to demand more accuracy of physiological statement, and more amplitude of clinical evidence than he adduces in their support, and personal idiosyncrasy renders many common articles of food poisonous to some persons, while the same articles are health-giving and almost indispensable to others; and the facts which the author sets forth in regard to the influence of coffee upon his vision only emphasizes this general law. He says: "I have no doubt but what this weakness of the eyes, which results from coffee-drinking, is due to the sympathy which the optic nerve has for the nasal cavity."

If in his physiological researches the writer has established the facts set forth in this claim, he owes it to the cause of humanity to enlighten the medical profession upon the intricacies of the mysterious path by which he has reached the important discovery. He further says, "The brain, again, is intensely affected thereby (coffee-drinking), because the principal nerves of the brain branch off from the nasal cavity." To our mind, neither the physiological nor anatomical fibre of this quotation would suffer from further elucidation. His graphic description of the "slim and ghastly" multitude of "runts," with "eyes and features rendered flat" by coffee-drinking, meets a daily refutation in the stalwart, bright and full-eyed multitude, who have revelled for a life-time in the delectable aroma of this subtle and "death-dealing" coffee, with no thought of surrendering either their beverage or their vision. Again, in the face of the experience of the whole military world to the contrary, our author makes the assertion that coffee militates against "a muscular inspiration and prowess."

While no intelligent person will deny that the excessive use of coffee has an injurious effect upon the entire nervous system, upon all the special senses not confined to the eye, and upon all the vital functions of the human organism, or that in some rare idiosyncrasies it proves extremely poisonous, yet the general sentiment of the people, fortified by the experience of mankind, will place the brand of extravagance upon the claims of the article under discussion, and a great army of lively and robust "runts" will continue to thrive in all functional health and activity on that popular beverage known as coffee.

INFECTION AND ITS CONDITIONS.

DR. P. W. LATHAM, in his recent Harveian oration, made the following interesting remarks:—We may take another illustration from the process of fermentation. By fermentation sugar can be converted into carbonic acid and alcohol; but a pure saccharine solution does not ferment on the addition of a small quantity of fungi or bacteria in a pure state. Some nitrogenous material must be added as well, to act as food to the organisms, and then the transformation into carbonic acid and alcohol commences.

That it is only in particular conditions of a tissue, or at special times in its growth, that it furnishes suitable soil for the growth of the bacilli is shown by the following illustration from the vegetable world furnished by De Bary:—"The common garden cress, Lepidium sativum, is often attacked by a parasitic fungus of comparatively large size, Cystopus candidus. In consequence of this it shows considerable degeneration, swellings, curvatures of the stem, and often also of the fruits, and on these parts and on the leaves white spots and pustules, subsequently turning to dust, which are formed by the sporogenous organs of the Cystopus, and give the entire phenomenon the name of the white rust in cress. This is a case of disease, and so striking that everyone notices it at once with the naked eye.

Now we find in a bed of cress at about flowering time a certain number of rusty plants—two, for example, or twenty. They are in the middle of the other hundred or thousand plants, and these are healthy and free from the fungus, and continue so till the period of vegetation is at an end. This is the case, though the Cystopus forms countless spores in the white rust pustules, and the spores are dispersed as dust and are at once capable of germination, finding the necessary conditions for their further development in the bed of cress, and are the instruments by which the white rust disease is eminently infectious. Nevertheless, those hundred or thousand plants are not infected.

All that has been hitherto said is strictly correct, and, if we limit our view to this, we shall see in the phenomena which have been described a conspicuous case of individual difference in predisposition; a case, too, perhaps, if we judge hastily, of sickly predisposition in the plants attacked, for they do become sick and the others do not. And yet this is not the true account of the matter. Every healthy cress plant is equally liable to the attacks of the Cystopus and to the rust disease which it causes, only the liability is confined to a certain stage of the development, and ceases once for all when that stage is past. The germinating cress plant, in effect, first unfolds two small three-lobed leaves, the seed leaves or cotyledons; when it has grown a little further and formed more foliage leaves, the cotyledons wither and drop off.

It appears, then, that the germ tubes of the fungus of white rust find their way into all the cotyledons, and are able to develop there; and if this development has once begun, the fungus establishes itself at once in the tissue into which it has penetrated, and grows on, in, and with the growing plant, and produces the disease. The germ tubes of Cystopus may, indeed, make their way for

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a short distance into all the other parts of the plant, but are unable to establish themselves inside it and continue their development. The plant is for the future safe from the attacks of the parasite as soon as the cotyledons have fallen off. The two or the twenty rusted plants in the bed are the ones in which the fungus attacked the cotyledons in good time; if it had attacked the thousand others in equally good time, all would have been rusted. They continued healthy because they were not infected in the stage in which they were open to infection—that is, predisposed."

Messrs. Thomas Symington & Co., Beaverbank Works, Edinburgh, have been awarded first-class diplomas and silver medals at the industrial exhibitions held at Aberdeen and Cardiff this autumn for the excellence of their coffee beverages and "Perfect" malt extract.

The Season for December (13, Bedford-street, Covent-garden, W.C.) is replete with information and illustrations regarding winter dress and costumes for ladies. As a practical guide to the dressmaker's art and to the fashions of the day, this magazine has no equal.

A Boston lady went to call on a friend the other day. She was met by the mother of her friend, a zealous believer in faith cure, who said apologetically, but cheerfully: "My daughter has a belief in a boil, and can't come down."

Milk.—Dr. S. Henry Dessau, in a letter to the *New York Medical Record*, recommends the use of fresh condensed milk as a substitute for mother's milk. His objections to the use of cow's milk as supplied by the milk-dealers are, that during the summer months it is impossible to obtain it fresh and unadulterated in large cities, unless at a cost beyond the reach of the masses. All of the milk that is delivered in the market of New York is at least from twelve to twenty-four hours old, and has undergone rough transportation of from fifteen to thirty miles in not strictly clean vessels. The cans used in bringing the milk to the city are not cleansed until returned to their owner. By the time that the milk has reached the poorer classes, it has commonly undergone more or less adulteration, often in spite of the closest watching by the health authorities. In the course of its consumption by the average infant, it is still further liable to lactic-acid fermentation, and, even though boiled, it is not unlikely to become scorched or made otherwise unwholesome for the infant Perhaps the most important objection to cow's milk, notwithstanding the fact that it is regarded as the nearest approach to mother's milk, is the difficult digestion of the caseine by the delicate infant whose stomach has been damaged by an attack of summer diarrhœa. This has necessitated the invention of numerous means and measures for overcoming the obstacle, the most common of which is the addition of some farinaceous substance. Such practice for an infant previous to the eruption of its teeth, is contrary to the provisions of nature, and, though occasionally successful, cannot be defended as a general usage upon physiological principles. Dr. Dessau thinks it impossible to adulterate condensed milk, and that the caseine of condensed milk is so altered in the condensing process as to be very easily digested. He even prefers it to milk sterilized by Soxhlet's method.

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The Family Circle

"The child is father of the man."—*Wordsworth.*
"In bringing up a child, think of its old age."—*Joubert.*

EXCESSIVE WAX IN THE EARS OF CHILDREN.

By Charles H. May, M.D.

(*Visiting Ophthalmic and Aural Surgeon to the Randall's Island Hospitals; Consulting Oculist and Aurist to the Woman's Hospital, Brooklyn.*)

It is a well-known fact in medicine that the gravity and the number of symptoms are not dependent upon the size of the exciting object, but upon the sensitiveness and importance of the particular organ or part of the body affected. Of this many examples might be cited. Death often ensues from very small wounds of the brain, profound symptoms from very slight injuries to internal parts, and loss of sight from the effects of the minutest particles of foreign material. And so it is that the production of an excessive amount of wax in the ear is often the cause of symptoms which, though never dangerous, are marked and are very annoying.

The ear is responsible for a good many of the ills of childhood, and it seems very probable that it is oftener the cause of trouble in children than we suppose; the reasons for supposing this are that the essential parts of the organ of hearing are buried and removed from sight, more or less hidden, and that very frequently symptoms are referred to other parts of the body which are really due to the ear. Thus we sometimes hear of an "ear-cough"—that is, a cough actually produced by the application of irritation in some form or other to the drum-membrane of the ear. That this can occur is readily proved by tickling the interior of the ear of a child with a feather or similar object, and noticing the cough which follows in most cases, or by performing this experiment upon ourselves and noticing the irritation in the throat consequent upon it. Again, many symptoms referred to the head are due to ear troubles; hence it is very likely that the ear is the author of considerable mischief for which some other part of the body is blamed. This explanation is given in order that the following lines concerning "wax in the ear" may be better understood.

A certain amount of wax is physiological and proper; it is produced by a number of small glands in the ear, and its uses are the following: First, to keep the canal and the drum-membrane of the ear in a soft, moist condition, and thus favour their best action in hearing; no membrane acts well when it becomes too dry, and this the wax prevents. Secondly, it keeps out foreign bodies from the more important part of the organ of hearing; in this it is aided by the bunch of hair which grows at the entrance to the canal. Finally, it is said to prevent insects of all kinds from crawling up into the ear, and not only doing damage there, but also giving rise to excruciating distress by the intense tickling which their presence would excite. The wax has a peculiar odour, often very faint, but still obnoxious to insects in general; sometimes, however, the wax seems to have lost this odoriferous principle, or the insect does not seem to object to it from some reason or other, for it has occurred that flies have entered the ear and laid their eggs there, and maggots are not infrequently found in the ear.

When from any cause there is an excessive production of this waxy secretion, symptoms result which are due to the stoppage of the canal through which sound should

enter, and also to irritation produced by contact and pressure of this waxy mass upon the drum-membrane. Excessive production of wax in the ear is much less common in children than in adults; but it may be commoner than is ordinarily supposed, for when children are too young to describe their symptoms it is probable that the affection passes unrecognized, and no cause can be found for the child's crying, although the little sufferer may place its hands to its ears to indicate that here the cause of its distress resides. When children get older, and are able to describe their sensations, they complain of the following symptoms:—

There is, in most cases, more or less *deafness*, due simply to the mechanical blocking-up of the sound-conducting canal; in some cases this comes on suddenly, and then this is explained by the fact that some sudden jar has altered the position of the mass of wax and propelled it against the drum-membrane. The deafness is not a total one, but only partial, for even when both ears are affected, some sound can still reach the interior of the ear.

Another symptom which accompanies this condition as frequently, if not more so, than partial deafness, is the occurrence of *peculiar noises in the ear*. These vary considerably; those described most frequently are rumbling, hissing, drumming, music, sound of waves, sounds of a locomotive; or, as a little patient once informed the writer, she thought "a steamboat was in her ear."

A third symptom, less constant than the others, is *pain;* it may, however, explain certain protracted crying-spells in children. Finally, we may have symptoms referred to neighbouring parts of the body, the head and the throat, as has already been explained.

The cause of such excessive production of wax can, in some cases, be attributed to ear-disease. But in most cases no assignable cause can be found; we may say there is disease of the glands producing the wax, but the cause of such disease would still be unexplained: just as in the affection of the scalp called "dandruff" we know that certain glands must be diseased because there is an over-production of their secretion, but what the cause of this is we are very often unable to say.

The treatment of excessive wax in the ear may be summarized in one word: *Removal*. But though the indication is a simple one, its carrying out is not always as easy. It is true that it consists simply in removing the offending material; but to dislodge this without any injury to the ear is not always easy of accomplishment. In fact, the writer hesitates to recommend any plan of removal on this account, and, on the whole, perhaps it would be better to say that it should never be attempted except by professional hands; for though, very frequently, syringing out the ear in a suitable manner will be all that is necessary, still, in other cases, drops may have to be employed to soften the wax prior to removal, or the procedure may have to be effected by dislodgment with delicate instruments. So that the object of this paper is not to recommend any plan of treatment, but to call attention to a train of symptoms which sometimes results from so apparently trifling an abnormal condition.

The ear has, perhaps, no greater enemy, nor one more to be feared than the hair-pin, unless it be its equally destructive friend, commonly called the "ear-spoon" or "ear-cleaner." These two instruments are often employed to remove wax from the ear, whether it be in excess or not. It may be taken as a safe rule that whatever wax cannot be removed by the little finger, with its nail closely pared and enveloped by a single thickness of a handkerchief or piece of soft linen, should be left there, or, at least, not removed by the mother. Hair-pins and like domestic instruments often cause damage to the ear-canal, and even the drum-membrane; hæmorrhage from, and wounds of, various parts of the organ of hearing are not infrequently met with by the aurist as a result of the mother's resorting to the use of these instruments; and many an infant and child will be saved pain and further ear-disease if these two domestic instruments are abolished from use in the nursery altogether.—*Babyhood.*

Father (haughtily)—"Well, sir!——" Son (imploringly)—"Forgive me, I know how deeply I have wronged you, but I am young, and I have yet time to make reparation. If a future life of honesty——" Father (angrily) "Honesty! ha, ha! Who prates of honesty to a retired ice dealer?"

The important question . . . is whether the moderate use of alcohol favours tuberculosis or the contrary. We believe it will generally be admitted that, on the whole, such use of alcohol is beneficial to persons having the disease. That its moderate use among persons of phthisical tendency is beneficial or prophylactic is another question, which can hardly be as yet answered. Probably the influence of race, climate, and individual predisposition must here be taken into account.

A Needful Lesson.—The magistrates of Bootle had lately a painful duty to perform. Two persons were brought before them for reckless conduct in removing from infected houses clothing and bedding which had been used by fever patients. The first offender was a coal-porter, who took the infected articles from a room where his child had died from scarlet fever to another house. The second was a poor woman who had pawned a quilt to buy food for her fever-stricken son. In both cases nominal fines were inflicted. The magistrates undoubtedly took the proper view of these cases, for the Public Health Act is before all things educational, and in these pitiable cases, where ignorance was pleaded, it was sufficient to teach the lesson that such conduct must, in the public interest, receive punishment. But we would desire to submit to the inhabitants of Bootle, and indeed of all other towns, the consideration whether this ignorance is not a reproach to themselves. So much good has been done by local sanitary associations, by recognizing that the education of the people is the basis of public health administration, that we would desire to see such societies constituted in every part of the kingdom. In Bootle the local authority will, we trust, be at pains to make these convictions known to every inhabitant of the town, otherwise the effect of the punishment which has been inflicted will be lost; but this could best be done if working with them were a body of lay helpers such as we have mentioned.—*Lancet.*

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When Faith grew doting, and our reason cold,
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And taught a language to its lisping tongue."

—*Charles Mackay.*

THE COMPARATIVE ANTISEPTIC VALUES OF VARIOUS CHEMICAL SUBSTANCES.

By C. T. Kingzett, F.I.C., F.C.S.

It was pointed out at a recent meeting of the Chemical Society that in all probability the antiseptic effects of various chemical agents upon micro-organic life are more or less general, in the sense that as they act on one micro-organism so they do on others, either by killing them or by so altering the composition of the medium that it becomes henceforth incapable of sustaining life or development. This view is strengthened by the consideration that the processes of chemical change which are set up by micro-organisms are all of the same order, and two chemical acts only are involved—viz., hydration and oxydation, the latter process being probably in all cases secondary to the primary one of hydrolysis. It is, he considered, by chemical hydrolysis as induced by micro-organism that toxic products like sepsin, tyrotoxicon, ptomaines, &c., are elaborated, and they constitute real infectants. This view being now generally accepted, the author claimed that his results were really comparable in character and reliable for guidance in matters of public health and medical practice.

Three series of experiments were described, the first being a complete repetition of those formerly communicated to the Society concerning the antiseptic values of chlorides, nitrates, and sulphates, in respect of extract of beef containing a little under two per cent. of total solid constituents. The results confirmed the previous ones, and it was shown that these compounds of the alkali metals have little value as antiseptics: those of the alkaline earths are not much better, while those of manganese, zinc, tin, iron, lead, and aluminium have a decided value, and the compounds of copper and mercury are the best so far as they are applicable. Perchloride of mercury was placed at the head of the list.

The second series of experiments included trials with selected chlorides, nitrates, sulphates, and "salufer," "sanitas," and "bactericide." A saturated solution of salufer ranked equally with the solutions of sulphate of aluminium and chlorides of lead and tin. Mixtures containing ten per cent. and upwards of ordinary "sanitas" fluid remained intact collaterally with the test mixture containing "bactericide" and the chlorides and sulphates of copper and mercury, the author, therefore, insisted upon the great value of "sanitas" as a disinfectant for popular and medical use, being wholly innoxious and thoroughly reliable, ten cc. being equal in antiseptic effect to five cc. of a five per cent. solution of corrosive sublimate. Incidentally, he called attention to one deficiency of perchloride of mercury as a disinfectant—viz., its want of "power of oxydation." While it kills all micro-organisms—germs and spores—it has no effect upon the toxic products which they elaborate, and which are frequently, therefore, associated with them; and it was this view that led Mr. Kingzett to introduce his "bactericides"—a series of preparations containing definite percentages of substances of ascertained antiseptic value, as determined by himself, dissolved in a strong solution of peroxide of hydrogen.

The third series of experiments related to some of these compound solutions and other mixtures which had been tested in course of their preparation. Some of the results were of great interest. It was observed, for example, that borax, when neutralized with boric acid, is not such a good antiseptic as ordinary borax, although boric acid itself is superior to that substance. Chloroform, although antiseptic in character, is not so good as lately represented in some medical papers. Chloral has a pronounced antiseptic value, so has the bisulphate of potassium. Sulphate of quinine, dissolved in a slight excess of sulphuric acid, acts much more potently as an antiseptic than the disulphate of quinine, a result which Mr. Kingzett attributed to the free acid—indeed, the influence of the acid reaction is very evident, and acetic, oxalic, sulpho-phenic, and hydrochloric acids have all powerful antiseptic properties. Sodium benzoate, ether, caustic potash, and chlorate of potassium exhibited comparatively little antiseptic value.

In reviewing the whole results, and after indicating the probable value of many of these substances and compounds in medicine, the author called attention to the usefulness of the general results, remarking that when a so-called new disinfectant is brought out, it will be only necessary to ascertain its composition, and then to refer to his tables to determine its approximate value. For instance, he adduced kamphorkalk, a mixture of the chlorides of sodium and calcium with a small proportion of camphor, and said its antiseptic value could not exceed in any material sense that of its constituent saline bodies, which, as judged by his results, was comparatively insignificant. The author promised to contribute a further paper respecting his "bactericides" later on. We may add for the information of our readers that all the new combinations are patented.

A Seat for use in Bath Tubs.—An adjustable and sliding seat for bath tubs has been patented by an American inventor. The seat proper is preferably made of hard wood, and somewhat shorter than the ordinary width of a bath tub. It is provided at its opposite ends with bent metal arms forming hangers, by which the seat is supported in the bath tub, the lower ends of the hangers being bent to fit and slide within a longitudinal groove in the under side of the seat, where they are secured by thumb screws, being adjusted relatively to the ends of the seat as desired to adapt the seat to bath tubs of different widths.

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"Isabella Thwaites."

THE REMINGTON TYPE-WRITERS.

An exhibition of Remington type-writers, representing the various stages of development the instrument has undergone since its invention twenty years ago, was held recently at Anderton's Hotel, Fleet-street. The object of the exhibition was to show off the improvements of the latest edition of this useful instrument. The visitor was first of all introduced to the primitive Remington, as made in the year 1870, an efficient machine if not worked too rapidly. The principle of the Remington is manipulation of a keyboard, which works a number of levers arranged in a circle, each lever bearing at end a type, which strikes home, each one in turn, at the centre of a circumference formed by the upper ends of the levers, and over which the paper passes. The fault of the original machine was that when worked rapidly, the carriage guiding the paper would oscillate so as to seriously mar the alignment or spacing, not so much between words as between letters in a word.

The next machine on view was one which was issued in 1882, and of which the carriage was rather smaller and a trifle firmer. It was designed with a special view to the requirements of ministers in the preparation of sermons. Another variety was issued in the same year as adapted for commercial purposes, and in this a further attempt was made to secure stability in the carriage in rapid working by the use of "tumblers"; but this device proved of little avail, because the tumblers when oscillating rapidly did not take a firm grip of the bars they were intended to control. In this variety two sizes of letters were introduced, and provision for the first time was made for making manifold impressions.

In 1886 came forth a further improved machine, wherein steadiness was secured by the attachment of two yokes to the carriage-rod. Still it was felt that the problem of steadiness had not received adequate solution, and further inventive thought was given to it. It is claimed that this end, and much else, is accomplished in the last instrument in the series,—the Remington type-writer of 1888. As compared with its predecessors, its build is decidedly squarer and of better proportions. By various methods, the better alignment of the writing is insured. The connecting-wires have been so arranged that they have a direct instead of a lateral pull. In addition to this, four long steel yokes are used over the carriage shift rail, and two V-shaped wheels run over the guide-rod, so that almost absolute rigidity is secured. Manifold plates have been devised which fit over the guide rail, and thus insure perfect alignment, even when making as many as fifteen copies at one time.

In the new machine eight additional characters, consisting of fraction marks and other commercial signs, are added; paper of greater width can be used; the "dog" movement is simplified, giving freer movement to the carriage, which can now be manipulated with the left hand while the right is operating the keyboard. In order to overcome the increased weight imposed by the lengthened carriage cylinder, several ingenious devices have been adopted. Increased facility is given for making corrections. The ribbon attachments, which, up to now, have been accessories, have been made part of the machine, and by this means all curling of the ribbon is obviated. The alteration from one class of type to another,—lower case to capitals,—is very much facilitated. The type-bar plan of bringing the type to a common printing point has been retained, but the arrangement of the bars round that centre is no longer circular, but oval.

All these matters were courteously explained to the visitors, in more or less detail, as they inspected the different machines, which were being operated by ladies. The price of the new machine runs to about £23.

Daily practice for about three weeks enables a person of ordinary faculties to become proficient in the use of a keyboard type-writer. Operators, of course, vary in their power of speed, but the machine isthree times faster than the pen. If Mr. Smith can write on an average twenty-five words per minute with the pen in common writing, he will print with this machine (after the requisite practice) at the average rate of from seventy to seventy-five words per minute. One of the operators (a gentleman) present at the recent exhibition attained a speed of 101 words in a trial test with a Remington at an American exhibition; although the remark has to be made that the matter printed was familiar to the operator, being, in point of fact, an advertising circular. Still, the achievement was noteworthy enough, especially considering that no contractions whatever were employed. The speed thus attained in type-writing is the despair of many an amateur shorthand-writer; and, indeed, anyone who can write shorthand without contraction at the rate of this Remington operator, would be entitled to consider himself an expert stenographer. Type-writing is much in vogue in America, being there as much the rule as it is here the exception, and the Remington machines stand at the head of the list for simplicity, speed, and every other condition of effective writing.

Water that rice has been boiled in is an excellent wash for the complexion. A teaspoonful of powdered charcoal in half a glass of milk, taken for three consecutive nights, and a seidlitz powder the morning after, is also excellent. A young lady of my acquaintance, who has a beautiful pink and white complexion, told me it was due largely to bathing her face in hot water and drying it with a chamois skin. If the face is inclined to redness the following recipe is said to be excellent: Emulsion of bitter almonds, four ounces; twenty grains of borax. Apply with a piece of soft sponge or chamois, and after it has remained a few minutes wash off with warm water. It is perfectly harmless, recommended by good authority. Lemon juice will remove ordinary tan. Rubbing the face lightly with almond oil before retiring at night will prevent and help remove wrinkles.

Plumbing.—The corporations of the Hartlepools have been co-operating to promote the system of national registration of plumbers established by the Plumbers' Company. The mayors of both places have just congratulated each other at a public meeting upon the fact that their first co-operation since the incorporation of Hartlepool as a municipal borough should be in a matter of such vital moment to the public health. Dr. Gourley, medical officer of health, who took part in the meeting, said he was sure no one present could fail to recognize the importance of the movement, and he was sure he would have the support of the Health Committee. It could not be denied that in the past no one had given so much work to the doctors as plumbers. Therefore he hoped the present movement would go on and prosper, and that before long every plumber, not only in the Hartlepools, but throughout the country, would be registered.

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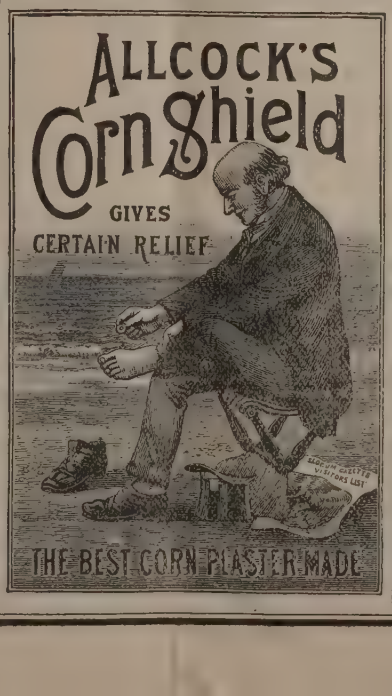

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"A happy home must be a healthy home."—*Anon.*

PRACTICAL PAPER HANGING.

The following upon this timely topic is from one of our contemporaries. It says: "The primary essential to commence a job of paper hanging is to have the tools. Any 'Jack' can work with a full set of tools, but it takes a good mechanic to work with poor ones. The best tools are the cheapest in the outcome, and are the most satisfactory.

An eight or ten inch bristle smoothing brush, a six to eight inch paste brush, a fourteen to sixteen inch pair of shears, a paper knife, seam roller, smoothing roller for borders and decorations, a straight-edge, plumb-bob, chalk line, paste-pail, size-kettle, paper boards, trestles, and step-ladder, these are the necessary tools for general work, though it is necessary, to save time and trouble, to have besides these tools a good sized kalsomine brush and a double width putty knife.

The next we need to proceed with is a bucket of paste. Use flour paste, except on very rare occasions when the tints are very delicate. The best patent flour is the most adhesive, and retains its consistency much better than starch.

Take a common patent pail and put in one half gallon of flour. Stir in enough cold water to mix a flour batter; work out all the lumps thoroughly, have ready three gallons of absolutely boiling water, and stir this until you have enough to cook it. Now pour a little cold water over the top to prevent skinning over until you are ready to use it. You can thin it down at pleasure.

If the paper put on is not a metallic ground, put in four or five ounces of alum in the paste. This will prevent its turning sour and hasten drying. Should the paper be metallic, use a little carbolic acid, in the place of alum, as alum is liable to turn gilt dark.

If the room you are going to paper is a hard finish, and not very badly smoked up, all that is necessary to prepare the walls is to brush them with a broom. Should they be smoked and dirty, it is best to go over them with a weak solution of glue and alum. If the walls have been papered before it is necessary to go over them again with a putty knife and cut the old paper off, pull out all nails, and with some plaster of Paris mixed with paste heal all the bad places.

If the walls have been whitewashed, doctor them with a strong solution of vinegar. Having the walls ready, lay a roll of paper on the boards, and with your straight-edge, which should be six feet long, measure the height to where the border will come and about an inch below the base boards, and cut the strips off. Match the next strip to the top of the previous one and cut enough strips to cover the room.

To ascertain the number of strips required, take a roll of paper and count the number around the room. Now turn the paper over if you have trimmed it; put the trimmed edges towards you and pull the first over, so that it covers the other strips. This is to prevent the paste from forming on the trimmed edge and making bad work.

Some paper hangers never trim the paper till after it is pasted. This procedure has some good features and some bad ones, which we will not discuss here. Beginners will find it better to have the paper trimmed beforehand. Commence at one end of the room and hang the slips as nearly perpendicular as you can.

Always brush the paper from the centre down and at either side. If you have wrinkles on the paper, pull it off to where the wrinkle is, and brush out from the centre. Run the shears along the paper at the top of base boards and cut off nice and even. Never allow the paper to look haggled or uneven around the base, and cut it close down but not overlapping.

When you come to an opening let the paper overlap, and trim with the paper knife as you work a saw. You will next need short strips, but do not run them beyond the opening unless the piece cut out of the other side will fill up the opposite; rather lap back again to be sure of a perfect match.

When you come to a corner, never lap the paper around it unless the space is very narrow. Fold up the strips at both ends, measure the distance with your ruled shears, lay the straight-edge on the paper, mark the distance just a little beyond the corner and cut. In this manner you will always have corners that will be square and stay in position.

Use the same roller and roll down the seams nicely as you go. Cut the border in such lengths as can be easily reached to put on, paste and double up at both ends, so that the lines meet exactly, and cut."

Quillaya Bark in Catarrh.—Dr. Trechinski writes in the *Ejenedelnaya Klinicheskaya Gazeta* that he finds powdered quillaya bark of great service in both acute and chronic catarrhal rhintis. It is put in a paper bag and the patient directed to shake it up and snuff up the dust from it every few minutes. At first the secretion is increased, and is of a brownish or yellowish colour from the admixture of pus cells. After a very short time, however, it diminishes in quantity, and becomes quite colourless. The nose then becomes dry and the passage through it clear. If the use of the quillaya is prolonged, the secretion is continued, but is quite colourless. The powder, when introduced into the nares and pharynx, appears to increase the secretion from the mucous membrane, but at the same time to remove all the pathogenic matter existing there.

Household Disinfection.—Mr. Conder, M.Inst.C.E., referring to the articles on the death-rate of Manchester, England, says: Allow me to call attention to the success which has attended on the method of disinfection which has been carried on for more than two years under the direction of the commanding officer of the corps of Royal Engineers, as stated in Vol. XIII. of the professional papers of the corps. Household disinfection is admitted by authorities on the subject to be the first great desideratum for the health of towns. By the iron process, as at work at Chichester Barracks, Windsor Castle, and more than eighty other places, the means of disinfection are readily applied at any portion of the sewerage system from the dressing-room to the outfall. Sewer-gas is destroyed, and a pure effluent and inoffensive deposit are produced by the same means. The exhaustive study made by the officers responsible for the health of all methods of disinfection is but little known to the public. No corresponding organization exists in the civil branch of the profession; and but little is known of the experience which has been gained by the expenditure of upwards of £20,000,000 by the urban and rural sanitary authorities of England. It can hardly fail, therefore, to be of public service to call attention to the results attained by the Royal Engineers.

Jottings from the Journals

" Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

Man's Moral Nature and Inheritance. — The moral nature of man has been developed, as his mental nature has been, by heredity acting through countless æons of time *pari passu*, and coterminously with the progress of civilization. In his primitive state of barbarism and savagery man had no adequate idea of morality. To hunting succeeded pastoral pursuits, and to pastoral, agricultural, and it is only with the latter that we can associate the dawn of civilization. "Primitive man, ignorant and idealess, the slave of his appetites and instincts, which were simply the forces of nature freely acting in him, rose but very gradually to the conception of the ideal. Art, poetry, science, morality, all those highest manifestations of the human soul, are like some frail and precious plant which has come late into being, and been enriched by the long toil of generations." Carlyle has said that civilization is only a covering underneath which the savage nature of man continually burns with an infernal fire; and that the philosopher was right is easily proved by the facility with which, on provocation, even the most civilized and highly educated manifest a reversion to the primitive instincts of the race, which in a moment may burst all the bonds which civilization has imposed upon them—when the brute nature appears with all its unbridled appetites and passions, and reasserts itself in all its primitive barbarism. For, as Ribot has well said, there exist in the bottom of the soul, buried in the depths of our being, savage instincts, nomadic tastes, unconquered and sanguinary appetites, which slumber but die not. They resemble those rudimentary organs which have outlived their functions, but which still remain as witnesses to the slow, progressive evolution of the forms of life. And these savage instincts, developed in man during the past, whilst he lived free amid the forests and streams, are from time to time recalled by heredity, as though to let us measure with the eye the length of road over which we have travelled. The basis of morals is responsibility; but heredity influences alike tendencies which are resistible and those which are irresistible, and here we are once again met with the unceasing conflict between free-will and fate, and I will only add that in this warfare, fatalism is more often triumphant than is usually admitted or imagined. Even Burdach, a staunch supporter of the free-will theory, admits that "heredity has actually more power over our mental constitution and our character than all external influences, physical or moral." To quote Ribot once more: If it be admitted, he says, that the moral act comprises a great number of ideas, judgments, and sentiments (as has been already shown by the influence of heredity on the development of sensibility and intelligence), then heredity also exerts a great influence on the formation of habits and of moral ideas—*moral heredity is only a form of psychical heredity.* —*Dr. Lithgow.*

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Alum Baking Powders.—Mr. C. V. Petraeus, in an article on baking powders in the *Pharmaceutical Record*, states that burnt alum is the most perfect acid element that can be used in baking powders, and for several reasons, viz.: 1. When exposed to the air, it does not become moist. 2. When mixed with bicarbonate of soda, and starch or flour, burnt alum evolves no gas at ordinary temperatures, therefore an alum baking powder does not deteriorate in the package like a cream of tartar powder—its keeping quality is far above the latter. 3. Though burnt alum does not dissolve in water, during the baking process it sets free the gas from bicarbonate of soda slowly, and with greater regularity than cream of tartar, and therefore does much better and more effective work. He shows further that 80 grains of burnt alum decompose as much bicarbonate (84 grains) as 188 grains of cream of tartar, and while the dry residue in the latter case weighs 210 grains, in the case of the alum it is 110 grains (71 grains sulphate of soda, 22 grains sulphate of ammonia, and 17 grains alumina). The use of alum in baking powder must not be confounded with its use for "improving" bad flour. In the one case the alum remains in the bread as alum, just as it was put into the flour; but when mixed with bicarbonate of soda, as in baking powder, it is entirely decomposed, and there remains in the bread only a few grains of insoluble alumina, which is quite as harmless as would be a few grains of white clay or any other inert material. For these and other reasons Mr. Petraeus considers that alum baking powders are the best, not only because a given quantity will rise more bread than the same quantity of cream of tartar baking powder, but because of the small quantity and innocent character of the residue they leave in the bread. A suitable formula for alum baking powder, based on the figures given above, would be as follows: Burnt alum, in fine powder, eight ounces; bicarbonate of soda, eight ounces three drachms; rice flour, one pound.

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The Influence of Occupations on the Railway on Health. —The Association of German Railways have just published the fifth annual statistical report on the sickness of their *employés*. The number of the *employés* has increased from 79,993 in 1882 to 108,800 in 1886; if the numbers for each year are added together, the total comes to 454,046. In this population, during the four years, there were 219,220 on the sick list = 48·3 per cent., and the average duration of the illness was 21·7 days. A table of the ages of the workmen, and the proportionate number sick at each age during the four years is instructive:—

1882—1886.

Years.	No. of *Employés* during a year.	Per centage ill.	Mean No. of days ill.
Under 25	8,315	28·0	15·2
25—30	27,858	41·6	14·6
30—35	67,703	44·2	15.9
35—40	99,006	47·3	18·8
40—45	95,260	49·1	20·5
45—50	70,059	50·2	22·7
50—55	41,831	52·7	26·3
55—60	26,028	55·1	31·3
60—	17,986	56·4	41·6
	454,046	48·3	21·7

The table shows that illness is less frequent to the age of twenty-five years, and then that liability not alone increases, but that the mean duration of sickness also increases; this is made very clear by the following table, in which the age period, from 25—30, is taken as 1·0:—

Years.	Frequency of Illness.	Mean duration.
25—30	1·0	1·0
30—35	1·1	1·1
35—40	1·1	1·3
40—45	1·2	1·4
45—50	1·2	1·6
50—55	1·3	1·8
55—60	1·3	2·1
60—	1·4	2·8

The inquiry is next pursued as to which of the various occupations produces most illness:—

		Per cent. sick.	Number of days ill.
I.	Men actively engaged on the trains, such as engine-drivers and stokers	84·0	17·6
II.	Guards and others who accompany the trains	64·1	20·7
III.	Men attending to the permanent way ...	37·4	24·6
IV.	Men engaged on the railway stations ...	43·8	22·8
V.	Men in an inferior capacity in the stations		
VI.	Pointsmen		
VII.	Clerks and others	25·2	26·2

The kind of illness is classified under ten headings, and is given for 1882 only; it is shown that the most frequent disease is rheumatism, next comes those of the organs of respiration, then those of the digestive organs, while traumatic injuries occupy the fourth place.—*Public Health.*

Our Bookshelf

"Reading maketh a ull man."—*Bacon.*

CHRISTMAS BOOKS.

Messrs. Blackie & Sons, as usual, are well to the front, and have also taken time by the forelock, in respect of their Christmas books specially adapted for boys and girls. The elegance both of the letter-press and illustrations of Messrs. Blackie's volumes is too well known to need any comment from us. In the present instance, the characteristic care with which departments are attended to by this firm is well exemplified. No more elegant books for presents can be purchased or desired.

Girls will welcome Sarah Doudney's *Under False Colours*, a book dedicated to the Duchess of Wellington, and brimful of excellent moral instruction, conveyed under the guise of a pleasant and interesting narrative. That prolific and ever-welcome writer for boys, G. A. Henty, strikes out a new line in the shape of his story, *The Cat of Bubastes*, a tale of ancient Egypt, which, in addition to its exciting details, boasts of eight full-page engravings by J. R. Weguelin. Mr. Henty's story is valuable in an educational sense, as depicting ancient life in that strange country, which was the mother of so much of our modern learning. *Little Lady Clare*, by Evelyn Everett-Green, illustrated by R. Fowler, is a volume in which girls will feel interested. This tale is one of more than usual interest, and sustains its narrative throughout the entire volume.

That prolific writer and dramatist, G. Manville Fenn, contributes to Messrs. Blackie's series of Christmas Books a capital story for boys, entitled *Quicksilver, or the Boy with no Skid to his Wheel*. This tale will prove an exciting romance for boys, and its incidents are, moreover, calculated to teach a sound moral lesson. Ten full-page illustrations by Frank Dadd, are contained in this volume. *Captain Bayley's Heir* is a second book by G. A. Henty, in which he discourses of the Californian gold fields, and contrives to invest with new interest scenes famous as the groundwork of fiction.

For girls, *Meg's Friend*, by Alice Corkran, is certain to prove attractive, the interest in the story being remarkably well sustained. *When I was a Boy in China*, by Yan Phon Lee, a native of China now resident in the United States, is a most attractive little volume, dealing as it does with the varied phases of Chinese life, and being written by a native who has become acclimatized in the Western Hemisphere, among manners and customs of a type widely varied from his own. This book will be found interesting by many readers outside the category of the youths of both sexes; and as a faithful picture of life in the Celestial Empire, its value is of a very precise and decided kind.

COMMENCEMENT OF A NEW VOLUME ON FRIDAY, OCTOBER 5th.

IMPORTANT ANNOUNCEMENT.

BONUSES TO SUBSCRIBERS TO "HEALTH."

Health, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the Publisher, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain Health from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we offer the following Free Gifts and Bonuses to all who subscribe to Health for one year or longer:—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of Health, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of Health weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of Health so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of Health, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to Health, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with Health should be addressed directly to the Publisher, 2, Paternoster-square, London, E.C., and *not to the Editor.*

Glasgow Western Medical School.—We observe that lectures on public health will be given by Dr. P. Caldwell Smith, M.A., M.D., Diploma of Public Health, University of Cambridge. The lectures will begin after the Christmas holidays, and will have special reference to the examinations in public health by the Faculty of Physicians and Surgeons, Glasgow, the Faculty of Physicians, Edinburgh, and by the University of Cambridge. Prospectuses and further particulars to be had from Mr. Stenhouse, University-avenue, Glasgow.

Sanitary Appliances, Etc.

FORSYTH'S SANITARY WOOLLEN CLOTHING.

AMONG the exhibits which attracted a large amount of attention at the recent Glasgow Exhibition was the stand of Mr. R. W. Forsyth, of 13 and 17, Renfield-street, of that city. The Scotch Hand Frame, on which the "Hygienic" underwear sold by Mr. Forsyth is made, deservedly attracted crowds, who were eager to see how the woollen materials were woven into the well-known fabric. A further use was served by the exhibition to which we have referred. The public had then the opportunity of noting that the garments produced on the loom were really what they professed to be—viz., thoroughly pure and natural articles, containing no admixture of materials calculated to detract from their warmth-retaining properties. The value of woollen clothing as a preservative of health has never been denied, and in the garments made by Mr. Forsyth every quality and feature represented in so-called "special" and in foreign makes will be found to be fully represented. The fabrics under notice are, in the first place, utterly free from dyes of all kinds. They are made from the "long staple wool" of the fleece, and are prepared by the process known as "combing." Their purity is therefore beyond question, while the purchaser has a guarantee of the sound wearing qualities of the fabrics in this statement of their mode of manufacture. A point of great importance in the enumeration of the merits of woollen clothing refers to the *unshrinkable nature* of these goods. The makes of Mr. Forsyth exhibit this desirable feature to the full. They may be well described as *practically unshrinkable*, and the troubles experienced by those who wear inferior qualities of such garments are therefore completely avoided in the case of the goods under review. In the construction of these undergarments, great attention we find has been paid to the matter of finish, and the many improvements which have been introduced in the fastenings afford to wearers a greater degree of comfort than is experienced in the old styles of woollen clothing.

In respect of the variety of garments made in the "Hygienic" wool by Mr. Forsyth, great scope has been given to the inventor's experience and taste. There is not a single style or fit which cannot be supplied, and every age has been considered in respect of its need in the way of sanitary and cold-defying underwear. In addition to the usual shirts, drawers, and "combinations," we find articles which appeal to those of our readers who may require special articles suited to the protection from cold of different regions of the body. Thus body-belts, armlets, knee and elbow warmers, and even night-caps, are all to be found included in the list issued from 13 & 17, Renfield-street, Glasgow. Medical men have not been slow to appreciate for themselves and for their patients the benefits of the woollen goods supplied by Mr. Forsyth; and a very large amount of patronage of these garments, we learn, has accrued from the recommendations of physicians anxious to protect their patients from the effects of cold and chill.

In such recommendations we, for our part, heartily concur. When we add that the prices of Mr. Forsyth's goods are of extremely moderate kind, and that no fancy figures adorn his price lists, we shall have said enough to indicate our high approval of the "Hygienic" Woollen Underwear—an approval which may claim the additional merit of being founded not only upon the personal testimony of those who have worn the garments, but also from our own experience of their durability and comfort.

PREPARATION OF FRUIT SYRUPS.—Everybody knows, says M. Manche, in the *Archives de Pharmacie*, that syrups prepared from the fresh fruit juices are far preferable to any others; but that these syrups in their fresh state contain a large amount of carbonic acid is usually forgotten. When the process usually in vogue is followed, and sugar is added to the juices in the cold, a liquid is obtained which soon becomes so dense that the acid finds it difficult to make its escape when heat is subsequently applied, and the consequence is foaming, and sometimes a partial caramelizing of the sugar, from the fact that the syrup makes a denser layer at the bottom while the lighter juice is forming on top. To avoid all this, M. Manche recommends that the juice be boiled before any sugar is added, replacing loss from evaporation by distilled water. The result is said to be better in every way.

Our Letter-Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. *Those intended for the Publishing Office to be sent to* MR. A. P. WATT, THE PUBLISHER, *at the same address.*

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules:—

1. All questions are answered free of charge in the columns of HEALTH. A limited space only, is available for the insertion of replies each week.
2. All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

NERVOUS EXHAUSTION.

PULVERMACHER'S World-Famed GALVANIC BELTS for the Cure of NERVOUS EXHAUSTION and DEBILITY, have received testimonials from three Physicians to Her Majesty the Queen, and the leading Physicians of nine London Hospitals, including over Forty Members of the Royal College of Physicians of London.

The distressing symptoms of NERVOUS EXHAUSTION and DEBILITY are speedily removed by means of **PULVERMACHER'S world-famed Galvanic Belts,** which are so arranged as to convey a continuous electric current direct to the affected parts, gradually stimulating and strengthening all the nerves and muscles, and speedily arresting all symptoms of waste and decay.

Dr. H. A. ALLBUTT, M.R.C.P., 24, Park Square, Leeds, writes, Oct. 1888:—"I always recommend with confidence MR. PULVERMACHER'S BELTS. Ladies recovering from illness incidental to their sex will find these BELTS of vast assistance in restoring lost nerve power."

Dr. C. HANDFIELD JONES, F.R.C.P., F.R.S., Physician to St. Mary's Hospital, says: "I am satisfied that MR. PULVERMACHER is an honest and earnest labourer in the field of science, and I think he deserves to meet with every encouragement from the profession and scientific men."

SIR CHARLES LOCOCK, Bart., M.D., says:—"PULVERMACHER'S BELTS are very effective in neuralgia and rheumatic affections, and I have prescribed them largely in my practice for other similar maladies, paralysis, &c."

For full Price List and particulars, see New Pamphlet **"GALVANISM: Nature's Chief Restorer of Impaired Vital Energy."** Post Free from

PULVERMACHER'S
GALVANIC ESTABLISHMENT,
194, Regent-street, LONDON, W.
(Established over Forty Years.)

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL.

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and *not to the Editor*.]

POTTER.—Read HEALTH, No. 199, and note the article on "Blackheads" therein contained. You will find full information given therein.

H. C.—1. Take a teaspoonful of Easton's Syrup in a wineglass of water, twice daily, after your meals. 2. Note advice given to "J. Bell" in HEALTH of last week.

B. C. F.—Consult Mr. Harness, 52, Oxford-street, London, W., regarding a truss.

C. P. E.—Symington's Extract of Malt is one of the best that you can use. See recent notice in our pages.

J. ATWATER.—Take the following pill: Extract of Barbadoes aloes, two grains; extract of nux vomica, half a grain; extract of gentian, a grain and a half. Make a pill. One such pill to be taken once a day, half an hour before meals. The druggist should make you half a dozen such pills at a time.

PESTA.—See article on "Glycerine as a Cure for Constipation" in 285 HEALTH.

C. C. C.—The following may be used in cases of falling hair, by way of stimulating hair growth: Bay rum, two ounces; glycerine, two ounces; tincture of cantharides, one drachm; oil of bergamot, half a drachm; sulphate of quinine, ten grains; water, four ounces. To be used every morning, and to be rubbed into the roots of the hair, all other oils and pomades being avoided. Use a soft brush only, and wash the hair once a week or ten days at night with Bayley's Soap and tepid water. Keep the hair short for a time.

SCRATCH.—For the itching try rubbing a menthol cone over the parts lightly, or apply a little lotion made by dissolving one drachm of liquor of coal tar (Wright's) in a pint of water, thrice daily.

ALBERT R.—Apply to the French Hygienic Society, 56, Conduit-street, London, W., for their advice regarding hair-dyes. Try the Pommade Trichophile made by the society just named (see advt. in HEALTH). It is an excellent application for scurf.

CECIL P.—Write to Mr. Pulvermacher, 194, Regent-street, London, W., for particulars regarding his belts, which are thoroughly genuine appliances.

E. S.—Take a tumbler of hot water between your meals twice or thrice daily.

M. A.—You should use Grant's Scotch Oat Flour in place of oatmeal.

A. BELL.—You may with perfect safety take Cascara Cordial in doses of twenty drops in water, or in the form of Tabloids, between meals, once or twice daily. Eat stewed fruits, vegetables, and whole-meal bread; and avoid tea and coffee. Take Dahl's Cakes (advertised in our pages) regularly, and Scott's Oat Flour in place of tea and coffee.

LAX.—When the itching is present apply a little of the following lotion to the parts twice and thrice daily, after bathing in tepid water in which a little bicarbonate of soda has been dissolved: borax, two drachms; hydrochlorate of morphia, five grains: glycerine, half an ounce; rose water, four ounces. Mix. Label: "For outward use only."

DRAUGHTSMAN.—Any slight disturbance of digestion will produce the symptoms you name without interfering seriously with your health. Diminish your flesh food for a time, and drink Pitkeathly or Vichy Water (advertised in our pages) as a suitable beverage. Easton's Syrup (Sellers') as recommended to "Veritas" in last week's HEALTH will serve to brace you up, and to aid in curing the symptoms you mention.

A. B. C. (Birmingham).—You were duly replied to in HEALTH for November 2nd. If you do not choose to look carefully enough for your reply, do not blame us.

SPES.—Who is the "Eminent Doctor" who wrote the book you mention? A good many "eminent" persons who write on that subject deserve that epithet only from their quack-practices and notorious swindling habits. Read the pamphlet, "A Lecture to Young Men" (post free, for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and learn therefrom how to treat a case like yours. You need feel under no alarm, as you are not ill, and only need care in diet and habits (as noted in the pamphlet above named) to restore you to your normal state.

DELTA.—If you consider that each adult should be allowed at least 3,000 cubic feet of air per hour, you can inform the manager of your school that he is violating every law of health by the overcrowding to which he subjects the classes. There is no system of ventilation which can obviate the risks incurred by such gross overcrowding. You may limit such risks (dangerous alike to master and pupils) by resting the lower sashes on blocks of wood, so that air comes in between the sashes (Hincks Bird's plan), and by leaving the chimney free and open as an outlet-shaft; but gross overcrowding such as you describe cannot be cured by ventilation, and the responsible persons should be duly warned of the evil to health they are perpetuating in this way.

W. W. K.—The treatment is perfectly correct; the rubbing with oil being a capital plan. It is evident from your description, however, that there are internal conditions to be remedied. Are you sure the child is not troubled with worms? At any rate, it is a clear case for a good medical opinion, and we should advise your taking the child to an Edinburgh or Glasgow physician, and have him thoroughly examined. Tell your doctor your desire in this matter, and he will at once acquiesce in the arrangement.

PEDESTRIAN.—We should advise you to take a teaspoonful of Easton's Syrup (Seller's) as advertised in our pages, twice daily, after your meals, in a wineglass of water, as a tonic likely to do you much good. Let your food be of nourishing kind, and clothe warmly. If not bettered, write again.

DAUGHTER.—In such a case, give plenty of starches and sugars, in the shape of vegetable foods, and, above all, do not neglect the fats. Try a dessertspoonful of Thomson's Cod Oil Cream (advertised in our pages) given after meals, thrice daily. This acts both as a food and a tonic. Vary the diet with white boiled fish (with butter sauce) and puddings made with Marshall's Tritola and like foods. There should be no difficulty in giving the patient a full dietary in this way. Plenty of milk should also be taken, with Henderson's Perfect Food Biscuits moistened or dissolved therein.

G. H.—The Xylonite Truss, made by the Medical Battery Company, 52, Oxford-street, W., is an appliance which will suit your case.

E. P. R.—To cure chilblains, brace up your system by taking Scott's Cod Oil Emulsion (advertised in our pages), and of this take a dessertspoonful twice daily after meals. To the chilblains, apply a little of the Russian Chilblain Paint, as advertised in our pages.

MARK.—Take a vegetable dietary—stewed fruits, apples or oranges, &c., and whole-meal bread, with Scott's Oat Flour for supper and breakfast; avoid tea and coffee; take Cascara Cordial, twenty drops in water, between meals, once or twice daily.

FOHE.—Apply to Mr. Pulvermacher, 194, Regent-street, W., whose electrical belts are of genuine character.

A. R. P.—Read the pamphlet, "A Lecture to Young Men" (post free for 1s. 1d. from Mr. Renshaw, 356, Strand, London, W.C.), and you will find full instructions regarding your health therein.

A PLEASANT EXPERIENCE.

"I HAVE suffered for many years with Rheumatism," writes Mrs. Sarah Mumford, of 39, North-street, Manchester-square, London, W., "and I never found relief until I had taken a course of 'Warner's SAFE Cure,' and 'Warner's SAFE Rheumatic Cure.' I tried doctor's prescriptions and many advertised preparations, but gradually grew worse. My hands and feet were badly swollen, my appetite was capricious, and I was greatly reduced in flesh. I was also very nervous, and suffered extremely from a complication of diseases, which seemed to aggravate my rheumatism. The pain at times was so great that I thought I could not bear it, and it was only with the greatest difficulty that I was able to walk. While in this apparently hopeless condition, a friend of mine sent me your valuable medicines, with the request that I should give them a trial. I did so, with the result that they agreed with me perfectly, and I was soon able to walk about with ease. I am now as strong in hands and feet as the average woman, and do not tire with exertion. My recovery is all the more wonderful when I think of the low condition I was in prior to commencing the use of the 'SAFE Remedies.' In fact, I had renounced all hope of cure, because of this and the many vain efforts which had been made by the most skilful physicians in my behalf. I shall ever be thankful that I tried the 'Warner's SAFE Remedies,' and I must confess that I can enthusiastically endorse them. I am led to make this voluntary statement solely by reason of my gratitude at having been restored to health."

Warner's SAFE Cure can be had of all Chemists and Medicine Vendors in the United Kingdom, at 4s. 6d. per bottle, or of H. H. Warner & Co., 86, Clerkenwell-road, London, E.C.

MAKEPEACE.—You suffer from "blackheads," which are filled-up skin-glands. Press out the matter from the glands, and then sponge the parts with a little of Bayley's Eau de Cologne. They are an evidence of defective skin-action. Take warm baths, use brisk friction to the skin, wash with Bayley's Soap, and avoid excess of fatty foods.

MAX.—To prevent boils, try the following: Sulphide of lime, twelve grains; sugar of milk, half an ounce. Mix. Take as much of this powder as will lie on a sixpence every four hours.

E. PAXTON.—The following is a suitable cough-mixture: Chlorodyne, one drachm; ipecacuanha wine, one drachm; syrup of squills, one drachm; glycerine, to make up two ounces. Label: "A teaspoonful in a little water at intervals."

ALBERT TAIT.—Inject twice or thrice daily with tepid water in which a few crystals of permanganate of potash have been dissolved, so as to give the fluid a light claret colour. Gradually reduce the strength of this fluid to a very light pink.

FABIAN.—Begin treatment by taking ten or fifteen drops Cascara Cordial once or twice daily, an hour before food, in water. Let the effect of this upon the constipation be watched, and eat freely of Dahl's Cakes, stewed fruits, whole-meal bread, &c., and take Pitkeathly Water as an ordinary table water.

W. D. FISHER.—You might try the experiment of taking your bath tepid in place of cold each morning. In addition, you will find nothing equal to a dessertspoonful of Scott's Pure Cod Oil Emulsion for bracing up your system, and toning your circulation at large. Take the oil after your meals, thrice daily. You must also look to your underclothing, and see that you are not exposed to chill.

Horsford's
ACID PHOSPHATE.

A liquid preparation of the phosphates, recommended by physicians for

Dyspepsia, Mental and Physical Exhaustion, Nervousness, Weakened Energy, Indigestion, As a Drink in Fevers, &c.

It makes a Delicious Drink. Invigorating and Strengthening. For sale by all chemists.

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RUMFORD CHEMICAL WORKS, PROVIDENCE, R.I., U.S.A.

DOIGS "Lapicide" KILL DISEASE IN EVERY FORM.
DROPS AND LINIMENT

UNPARALLELED for Bronchitis, Diphtheria, Chest, Liver, and Kidney Complaints, Diarrhœa, Constipation Congestions, Rheumatism, Gout, Inflammations, Children's and Female Ailments, Fevers, Ulcers, Old Sores, Blood and Skin Diseases, Wounds, Pains, Bruises, &c., &c.

Of all Chemists, 1s. 1½d. per bottle; or post paid of the Proprietor, ALEXANDER DOIG, 7, St. Paul's Churchyard, London, E.C. Demonstrations Free from 10 to 4 daily.

ONE IN TROUBLE.—You should reform your food-habits altogether. Avoid much butcher-meat for a time, and take plenty of milk, white (boiled) fish, milk-puddings (made with Marshall's Tritola), stale bread; and avoid pastry and cheese. Rest after meals, and take twenty drops Cascara Extract or Cordial in water, once a day, as a liver-tonic and laxative, or try the Tabloids of Cascara of Burroughs, Wellcome & Co. Tea and coffee should be given up or greatly limited, and Scott's Midlothian Oat Flour taken instead. If this treatment does not suffice to cure you, write again. Neither the pills nor the tea you name are adapted for your case.

ALPHA.—The probability is that your present surroundings are not agreeing with you. The air is probably too relaxing. Try the tonic recommended to "Veritas" in last week's HEALTH; and take a walk each night just before bedtime; or try the effect of a very light meal (milk and biscuit or bread) taken half an hour before retiring. Write again if not cured.

OMEGA.—You surely forget the questions you ask us, and are hence unable to understand our replies. Why not keep a copy of your queries? 1. We really cannot say anything definite regarding the cocoa and milk: some persons will digest the one more readily than the other, and *vice versâ*; but milk is, as a rule, the more easily assimilated. Add milk if you care to do so, by all means. 2. We have answered your inquiry already more than once by telling you that cream is the more digestible. 3. The celery question was also replied to previously,—our answer was "No."

FIZ.—1. Of no importance; simply wash the parts each night and morning with tepid water and Bayley's Spermaceti Soap, and apply a little vaseline thereafter. 2. Try a vegetable dietary for a time, limiting your flesh-meat. 3. Not at all; what you name simply indicates that your system is free from irritation.

GAZOGENE.—Not hurtful in any way, unless taken in excess, when it might be apt to induce flatulence.

CHARLES CLIFTON.—1. Question much too general; it entirely depends on the cause of the baldness, and how long that state has persisted. 2. Scott's Midlothian Oat Flour is one of the best of the cereal foods, and much more readily assimilated by many persons than ordinary oatmeal. 3. There is no advantage in employing saccharin for sugar, unless there is any ailment present in which sugar is hurtful. Of course, a very little saccharin goes a very long way as a sweetening agent.

BALDHEAD.—1. The left side is always somewhat lower than the right. 2. There is nothing unnatural in what you mention. Simply wear a suspensory bandage for a time, and continue your cold bath. 3. You only require a tonic. Take a teaspoonful of Seller's Easton's Syrup (advertized in our pages) in a wineglass of water twice daily, after your meals, and you will recover your tone. Pulvermacher's Galvanic Belts will also assist you. Read the pamphlet recommended to "A. R. P." in the present number.

ENQUIRER.—Follow the advice given to "Albert Tait" in the present number, and see that you avoid constipation, above all things. To this latter end, read advice given to "Edinburgh" in last week's HEALTH.

MONODY.—Try the effect of using an injection (once or twice daily) made by adding a tablespoonful of tincture of the perchloride of iron to a pint of cold water An injection of infusion of quassia, or one of salt and water, may also be tried, if the first fails. Give sufficient salt with the food, and avoid uncooked or unwashed vegetables. Strict cleanliness is also to be enforced.

W. WATT.—What you name is only a consequence of disuse, and also of your dyspepsia. It need cause you no trouble, and can be readily cured by your taking plenty of open-air exercise and a tepid sponge-bath each morning. For the rest, take the tonic ordered to "Pedestrian" in the present number, after meals, and if not bettered, write again.

A. E. H. (Reading).—Your question is far too general to admit of an exact reply. What do you mean by not feeling so strong? Look to your diet, in the first place, and note advice given to "Edinburgh" in last week's HEALTH. This treatment will probably cure all your symptoms.

Certain HARNESS' Cure.
ELECTROPATHIC BELT
FOR
SLEEPLESSNESS

SLEEPLESSNESS.—The Rt. Hon. LORD BYRON says that—"*Harness' Electropathic Belt is invaluable for sleeplessness, I recommend it to all my friends.*"

Guaranteed to generate a mild continuous current of Electricity, which speedily cures all Disorders of the Nerves, Stomach, Liver and Kidneys. Thousands of Testimonials. **Pamphlet & Advice free on application** to **Mr. C. B. Harness,** *Consulting Electrician,* the **Medical Battery Co. Ltd.**

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Easton's Syrup.

WHENEVER this Syrup is prescribed the best and purest Preparation should be taken. Made by J. SELLERS, Manufacturing Chemist, 57, Farringdon-road, London, E.C., who will forward either sized Bottle free by post for three extra stamps.

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BEFORE IT REACHES THE LUNGS

By taking a small Bottle of

SCOTT'S EMULSION

IT WILL SURELY CURE YOUR COUGH AT ONCE,

and, unlike ordinary cough remedies, will strengthen and build up your system.

SCOTT'S EMULSION is a skilful combination of Cod Liver Oil with Hypophosphites, and the potency of these two tried and unequalled remedies has been increased threefold by their ingenious combination with Glycerine into this very palatable Emulsion.

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FOR DELICATE, SICKLY CHILDREN, AND FOR EMACIATION,

it will increase flesh and strength when all other remedies have failed.

SCOTT'S EMULSION of Cod Liver Oil with Hypophosphites is entirely deprived of the disagreeable taste of plain Cod Liver Oil and is much more effective.

Physicians prescribe it in preference to the plain oil, having seen its remarkable curative effects.

All Chemists, at 2s. 6d. and 4s. 6d.

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These Essences produce in a few minutes a delicious temperance wine or cordial. Ginger, Orange, Raspberry, Black Currant, &c.

One tablespoonful of Mason's Extract of Herbs makes one gallon of splendid beer. Refreshing and non-intoxicating.

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BEST AND CHEAPEST.

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TRADE MARK. FOR THROAT IRRITATION COUGHS & COLDS. SPECIALLY RECOMMENDED BY

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A

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A complete Refutation of Quackery and a safe and reliable Guide, from the Medical standpoint, to all Young Men. Every Youth should read this pamphlet as a guide to the safe conduct of life in a moral and physical sense.

PRICE ONE SHILLING, or post-free 1s. 1d., from
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A WONDERFUL MEDICINE.

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BEECHAM'S PATENT PILLS. ST. HELENS LANCASHIRE

ARE universally admitted to be worth a Guinea a Box for Bilious and Nervous Disorders, such as Wind and Pain in the Stomach, Sick Headache, Giddiness, Fullness and Swelling after Meals, Dizziness and Drowsiness, Cold Chills, Flushings of Heat, Loss of Appetite, Shortness of Breath, Costiveness, Scurvy and Blotches on the Skin, Disturbed Sleep, Frightful Dreams, and all Nervous and Trembling Sensations, &c. The first dose will give relief in twenty minutes.

Every sufferer is earnestly invited to try one box of these Pills and they will be acknowledged to be

WORTH A GUINEA A BOX.

For females of all ages these Pills are invaluable, as a few doses of them carry off all humours, and bring about all that is required. No female should be without them. There is no medicine to be found equal to Beecham's Pills for removing any obstruction or irregularity of the system. If taken according to the directions given with each box they will soon restore females of all ages to sound and robust health. This has been proved by thousands who have tried them, and found the benefits which are ensured by their use.

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HOSPITAL TRAINED NURSES for every description of disease—MEDICAL, SURGICAL, MENTAL, and MIDWIFERY—can be obtained at this Institute on application to the Secretary or Lady Superintendent at a moment's notice, being resident in the Home.

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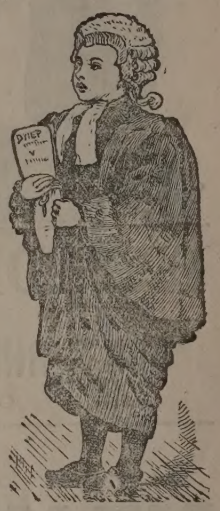

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THE great usefulness of this excellent Remedy, the POMMADE DIVINE, is so well known to all who have ever applied it, that no Encomium is necessary, and to those who are yet unacquainted with its virtues, a trial in the following cases will be its best recommendation :—

It is good for all sorts of Pains, Swellings, and Bruises occasioned by Falls, or otherwise, and will prevent the many bad consequences of such Accidents.

For a Cancer before it is broke, and for all sorts of Sore Breasts, particularly in a Lying-In.

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If a little be well rubbed in for a few minutes on a Bruise or Pinch, it will prevent Blackness. Will also cure Scalds and Burns, applied directly; and Rheumatic and Gouty Pains fixed in any part.

N.B.—No woollen of any kind should be applied to the parts affected, nor any metal (except silver) touch the Pommade. It will retain its virtues many years, and is therefore very useful to all Travellers, particularly Gentlemen of the Army and Navy.

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As highly useful family medicines for that most distressing of complaints, Hæmorrhoids (or Piles), Bayley's Remedies have long enjoyed a high reputation. These remedies consist of specially prepared Pyrmont Tablets for invalid use, and of a Pyrmont Liniment for outward application. The tablets are compounded on the principle of the famous Pyrmont waters, which have been so highly recommended in cases of liver complaints, to the presence of which piles are often due, as well as in cases of the latter ailment itself. The liniment is made on allied principles. From an examination of these tablets and of the liniment, we are able to assert that they contain nothing calculated to produce untoward effects in the most delicate constitution, while they are likely to prove most beneficial in mild and severe cases alike. The ease with which the remedy may be taken—the tablets being agreeable to taste, and being merely allowed to dissolve in the mouth—will recommend this preparation in the eyes of those especially who have run the gamut of the many drugs employed for the cure of hæmorrhoids. We recommend a trial of Messrs. Bayley's Tablets, &c., which are to be obtained at 17, Cockspur-street, London, W.—*Vide* HEALTH, *April 8th*, 1887.

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